

The Concept of Library Defined

Libraries are not institutions/buildings/warehouses/stores/bookshops etc of materials but are agents of educational, social, economic and political changes or revolutions in the community and their doors are open to all who need them.

The library is the nerve centre of any academic institution and one of its primary objectives is to acquire information materials according to the various disciplines in the institution.

It is a place entrusted with the acquisition, organisation, preservation, storage, retrieval and dissemination of information in whatever format it might appear.

Additionally, the library plays a crucial role in meeting the objectives of the university.

Definition of a Library

The Dictionary of Library and Information Science define library as a latin word *Liber* meaning book. The library is thus defined as a collection or group of collections of books and or/other materials organised and maintained for use(reading, consultation, study, research, etc)

The users of library resources will include lecturers, students (undergraduate and postgraduate) external users and neighbouring community. The services rendered in the library includes: registration of users, access to other libraries across the globe real-time online, electronic mails, current awareness service, inter library loan, access to online databases and subscription to various databases etc

OBJECTIVES OF THE LIBRARY

1. Acquire and organise relevant materials for the use of all in its environment.
2. Preserve and transmit knowledge through proper organisation of the library collections
3. The library helps in expanding the frontiers of knowledge by providing relevant materials to aid research process
4. Assist users in their quest for knowledge
5. To allow open access to its collection and provides services to its users

Week 4: The Library

Types of libraries: There are basically five(5) types of libraries and they include

1. National libraries
2. Public libraries
3. Academic Libraries
4. Special/private libraries
5. School libraries

THE LIBRARY AND ITS INFORMATION RESOURCES

The various information resources in a library include

- Books (Reference sources, Textbooks, government publication, Fiction and non-fiction, Periodicals such as Newspapers, magazines etc)
- Non-Book resources (Audio visual software and hardware), cartographic materials (Globes, maps, Atlases)
- Electronic resources, online databases, digital materials

I. BOOKS: The Dictionary of Library and Information Science defines a book as a collection of leaves of paper, parchment, cloth or other material (written, printed or blank) fastened together along one edge with or without a protective case or cover. UNESCO defines a book as a non-periodical literary publication consisting of 49 or more pages, covers excluded. Books form one of the major holdings of a library's collection. Books include the following

Reference Books/Sources

Reference books are probably the most fundamental to any library. Books in this units cannot be borrowed like books on the open shelves they can only be consulted in the section. The books usually have the inscription reference only.

Characteristics of Reference Sources

1. They are to be consulted for definite items of information rather than to be read from page to page.
2. It can only be consulted in the reference section.
3. They contain factual and specific information

4. They are housed within a separate section of the library
5. They are revised from time to time to suite recent developments
6. The arrangement of each material may be made to suite the peculiarity of that material. For instance in the dictionary arrangement is alphabetical while for works on history it could be chronological.

EXAMPLES of REFERENCE BOOKS

➤ 1. Encyclopaedias

An encyclopaedia is a compendium of summary of information from either all branches of knowledge or a particular branch and they are divided into articles or entries which are usually accessed alphabetically by article name. They also contain detailed words and entries than you have in dictionaries. Unlike the dictionaries the articles focus on factual information to cover the thing or concept for which the article name stands for.

Also, an encyclopaedia provides a well organised overview of selected topics of major importance. They deliver a survey presentation, a snapshot of how topics are. Examples of Encyclopaedia include: Encyclopaedia of Library and Information Science: New York: Marcel Dekker, 1975 to date. Has 36volumes with supplements, The new encyclopaedia Britannica: Chicago: Encyclopaedia Britannica(has 32 volumes)

➤ 2. DIRECTORY: A directory can be defined as a book which provides a list of names and addresses of people in an organisation or institution. It could also be defined as a list of people, companies, organisations etc in classified order, providing contact information(names addresses, phone/fax numbers etc.) and other pertinent details (affiliations, conferences, publications, membership etc.) in brief format, often published serially. They are used to locate organisation, institution people etc. Directories could also be used to verify the name or spelling of an organisation, as well as match individuals with organisations that can answer their information needs when they have to go beyond the resources of the library.

Examples of Directories

1. Directory of Lagos State Librarians
2. National directory of addresses and telephone number, Detroit, Michigan: Gale Research, 1985 to date.

- **3. ALMANACS:** They provide concise factual information about current and historical events, organisations, people, places and things. They often have the fastest and easiest way to locate concise facts or summaries. They consolidate information, summarising and synthesising it. They are compendia of current and retrospective statistics and facts often arranged in tables to facilitate comparison.

Examples of Almanacs

1. The world almanacs and book of facts, New York: Newspaper Enterprises Association, 1868 to date ; This almanac has information on different issues ranging from economics, health, religion, postal information of what happened, people in politics and major occurrences in that year.

- **4. YEARBOOKS:** They are annual documentary, historical, or memorial compendium of facts, photographs, statistics, etc about the events of the preceding year often limited to a specific country, institution, discipline or subject. They stress events and statistics for a single year, usually the year preceding the publication date. Yearbooks usually contain longer descriptions of events and more analysis and evaluation.

Examples of Yearbooks

1. Nigerian Yearbook. Lagos: Daily Times of Nigeria This publication gives a record of events, political and social life in Nigeria for the succeeding year. Important events in the previous year are highlighted. It also contains information on the history as well as economic trends in the country.

- **5. HANDBOOK:** They serve as a handy guide to a particular subject. They provide an overview of a subject and factual information in a brief format. Often large amount of information about a subject are compressed into a single volume and it reviews a particular topic in a factual and comprehensive way.

Examples of Handbook:

1. The English language Teacher's Handbook: the handbook is full of useful device on teaching approaches and effective ideas for learning activities. The handbook gives step by step instructions on lesson planning, teaching students to speak English, creative use of resources etc.

- **6. DICTIONARIES:** A dictionary is a book which contains the words of a language which are arranged alphabetically with their meanings, tenses, in some cases pronunciation and other pertinent details. It can provide information about the derivation of words, spelling, usage both current and old. Furthermore dictionaries are used to define words: verify spelling, syllabication, or pronunciation, to check on usage, or to determine the etymological history of a word. To some degree, they also standardise the language based on current usage. Dictionaries are consulted chiefly by persons who are writing or editing manuscripts, although they may also be used for clarifying the meaning of words in texts, or purely for satisfying intellectual curiosity. Dictionaries could either be descriptive ie recording how the language is actually used, or prescriptive, advocating how it ought to be used.

Examples of Dictionaries

The Oxford American English Dictionary, New York: Oxford University Press.

The Oxford English Dictionary, New York: Oxford University Press. 20vols

- **7. Geographical Sources**

The primary purpose for the majority of geographical sources is to help to locate places. They also deal with particular time period, either current or geographical. Geographical sources include Atlases, maps, gazetteers, travel guides.

- **8. Bibliographic Sources**

A bibliography is a descriptive list of books. It is a critical and historical study of printed books. It is an alphabetical listing by author's name, other names and the materials attributed to the author. It gives the librarian and other users useful information about the author, the publisher, place of publication and the price of either hardback or paperback.

Example of bibliography

Bibliography of publications issued by UNESCO or under its auspices; the first twenty-five years. Paris: UNESCO

British National Bibliography, London; Council of the British National Bibliography

TEXTBOOKS

The dictionary of library and information science defined textbook as an edition of a book specifically intended for the use of students enrolled in a course of study or preparing for an examination on a subject or in an academic discipline sometimes published in conjunction

with a workbook, lab manual and/or teachers manual. It also refers to the standard work used for a specific course of study, whether published in special edition or not.

A textbook is a classic publication used in the study of a subject. It usually contains a systematic presentation of the principles and vocabulary of the affected subjected. It may be written by one or more authors. It takes about four years to write and test a good textbook.

Generally, technical and professional books including textbooks are hardbacks.

FICTION

They occupy a unique position in a library holdings and this type of materials helps the library to meet one of its objectives of assisting the library user in his/her own personal development. These are general works that doesn't focus on a particular subject they are just for development. The presence of such books in the library is likely to discourage the practice of reading only books for prescribed examinations. Some of the best African fiction writers are Chinua Achebe, Cyprian Ekwensi, Chimamanda Adichie, Chukwuemeka Ike and Heinemann educational publishers has a good collection of African fiction writers. Also in this category are children's books.

Non Fiction

PERIODICALS/SERIALS

Serials have been described by Osborn(1980) as publications issued in successive parts, at regular or irregular intervals and intended to be continued indefinitely.

Periodicals/serials fall into different categories which depend partly on the purpose of the publication and partly on the type of publisher.

A specific serial title is identified by a unique International Standard Serials Number by (ISSN) and key title, assigned and maintained. Periodicals are published by scholarly societies, university presses, trade and professional associations, government's agencies, commercial publishers and non-profit organisations.

Examples of serials include journals, magazines, newspapers, newsletters, reports, proceedings etc

Magazines: This is a periodical publication containing articles and illustrations, typically covering a particular subject. It is sold on subscription and at newsstands and has articles on variety of topics written by various authors in a non-scholarly style. It is aimed at the mass market and attracts heavy advertising and the advertisements becomes an important source of information themselves.

Journals: This is a periodical devoted to disseminating original research and commentary on current developments within a specific discipline, sub discipline or field of study. There are basically two types of journals: learned journal and the professional journals. Most journals are peer reviewed. Usually journals are produced by learned and professional societies and are intended to report advances in human understanding and to report new insights into the fundamental principles underlying every discipline. Journals are more up to date than books and carry the results of in-depth investigations and the target audience is usually researchers. They form part a significant part of a library's collection especially academic and special libraries.

The professional journals are more widely circulated and geared towards practising professionals rather than researchers and academics. Some of this are produced by professional societies and others by commercial publishers.

Newsletters/Bulletins: This is a serial publication consisting of no more than a few pages devoted to news, announcements, and current information of interest primarily to a specialised group of subscribers or members an association or organisation who receive it as part of their membership. Newsletters provide useful information on the company's current development projects. Bulletins are brief report, especially an official statement on a matter of public interest issued for immediate publication or broadcast. Bulletin is also a brief update or summary of current news as on a television or radio or in a newspaper. The main aim of issuing bulletins is for communication especially among the organisations employees.

Newspapers: This is a serial publication usually printed on newsprint and issued daily, on certain days of the week, or weekly, containing news, editorial comment, regular columns, letters to the editors, cartoons, advertising, and other items of current and often local interest to a general readership. Also newspapers are printed publication consisting of folded unstapled sheets and containing news, feature articles, advertisements and correspondence

Reports: This is a separately published record of research findings, research still in progress, or other technical findings, usually bearing a report number and sometimes a grant number assigned by the funding agency. It is also an official record of activities of a committee or corporate entity, the proceedings of a government body, or an investigation by an agency, whether published or private usually archived or submitted to a higher authority, voluntarily or under mandate.

Proceedings: This is the published record of a conference, congress, symposium, or other meeting sponsored by a society or association, usually but not necessarily including abstracts or reports of papers presented by the participants.

Difference between Serials and Books

1. Serials by nature is unlimited, though it may be suspended but they are not conclusive as such they continue to be produced continuously whereas books are usually conclusive and complete and they could be in volumes which forms a single set.
2. Books could be written by one or more authors whereas serials have many contributing authors.
3. While a single book, with the exception of reference books/sources treats a single theme or general knowledge, serial publication usually focuses on a theme.
4. Serial publication are printed and published at regular intervals whereas books are published often times when the materials to complete the subject are ready.
5. Serial publications are usually dated and numbered, while a book is not (Kadiri, 1987)
6. All serial publication has a unique International Standard Serial Number (ISSN) and every standard book also has a unique International Standard Book Number (ISBN).

PROJECTS/THESES/DISSERTATION

These are works based on systematic investigations with a view to earning academic degrees such as Bachelor's doctoral and master's degrees. They are category of research materials which every research collection must have. They are always in high demand by postgraduate students working in a particular narrow field or the other.

GOVERNMENT DOCUMENTS

A government document is any document that is printed at government expense or published by the authority of a governmental body. They can be issued by the Federal and State executive, legislative and judicial branches of government. Most of the information is in printed form; but it can also appear in a wide variety of formats. Government's documents may be classified into

1. Records of government administration;
2. Research documents for specialists including a considerable number of statistics and data of value to science and business;
3. Popular sources of information-books, pamphlets, magazines, monographs, microfilm or almost any media.

Apart from Federal, State and Local governments, United Nations and its specialised agencies issue publications that are concerned with International affairs. The number of publications emanating from the organisation and its specialised agencies is so large that there is no alternative to highly selective acquisition. The physical form of materials issued by the United Nations varies greatly. The United Nations publications fall into the following categories:

1. Documents relating to the internal administration of the United Nations (budgets, personnel etc)
2. Documents concerned with the actual functioning of the organisation and with the implementation of its objectives and programmes (decisions, resolutions, verbatim records meetings, etc)
3. Yearbooks, statistics, collection of texts, etc which are produced for a very wide range of governmental and academic specialist, research workers and technicians, industrialists and businessmen;
4. Publications supplying information on one particular aspect or on the overall activities of the organisation (press releases, brochures, folders or periodicals). The nature of these publications is such that there is no single official United Nations document on a given subject.

Audio-Visual Materials

Two types of materials are combined here-audio materials and visual materials. The audio items are available in two forms-tapes and discs or records. Many libraries however restrict themselves to collecting 12-inches 33rpm long-playing microgroove recordings. Visual aids consist of mostly of films, filmstrips, slides, motion pictures, videos and video recordings. Films used in libraries come in 16mm size. They are so expensive that they are mostly procured by school systems, large libraries or libraries that have organised a film circuit in which films are shared. A filmstrip is a piece of 35mm film on which series of picture have been placed in a fixed order.

Relevance of Audio-Visual Materials in the Library

Audio visual serve as teaching aids in academic libraries. This is why they are sometimes housed in teaching departments. They can also be employed by students as a means of learning. Because of the difficulties in giving a succession of mass library orientation lectures, some academic libraries have experimented with the making of films to serve as introduction. A film can be shown to about 100 students at a time. Closed Circuit Television is one of the methods of giving library instructions. Audio visual materials are referred to as educational technology materials and they sometimes have their own sections in the library. They are particularly useful for instructional and illustrative purposes in school, special and academic libraries and for recreation in public libraries.

MACHINE-READABLE MATERIALS

These are collections of information held in some forms of computerised or electronic format. They include computerised databases held on mainframe, minicomputer or microcomputer. They also refer to databases published on floppy discs and can be made accessible online provided a telecommunication link is available. This corresponds to public card catalogue which can be made available via terminals and this is known as the Online Public Access Catalogue(OPAC).

Advantages of Machine-Readable materials

1. Speed in searching large amounts of data especially when multiple weekly or monthly issues have not been culminated.

3. Application to time-sensitive information. Any database held in machine-readable form can very easily up-dated.
4. Ability to search for information by several criteria at once. It is more visible to use multiple subject headings or other points of access than in the traditional methods
5. Desired information can be printed out in the form desired by the searcher.

THE LIBRARY CATALOGUE

The term catalogue originates from the two greek phrases Kata + Logos. Kata means according to and logos means order. So the literal meaning of catalogue is arrangement of reading material in a reasonable means in a particular order. According to J.D. Brown ‘Catalogue is an explanatory logically arranged inventory and key to the books and their contents and it is confined to the books in a particular library’. According to him catalogue is always a logically arranged and it is not only confined to the books but also includes their contents. H.A. Sharp in his book ‘Catalogue: A text book for use in libraries’ has defined the catalogue as a ‘list to books and other reading material in the holding of a library or a group of libraries. The list contains entries of books, arranged according to some definite plan’. the use of the term group of libraries creates confusion as the catalogue of group of libraries is known as union catalogue and not a catalogue. A library without a catalogue is very much in the condition of a man without a name, a gentleman without a card or an individual without a post office address.

To summarize, we can say that a library catalogue is a systematically arranged list of books, periodicals, manuscripts, maps, films, audio records and other graphic material. It contains the whole bibliographical information of a document viz author, title, publisher, edition etc. It is limited to a particular library.

The main function of library catalogue is to help the exploitation of resources of the library. Seeing the above functions performed by a library catalogue, we can say that it is an essential tool for locating the books from the library collection. Without a catalogue, a library is regarded as human being without eyes and a house without windows. Cutter has discussed the functions of library catalogue as:

1. To enable a person to find a book of which either the
- (a) Author (b) Title, or (c) Subject is known
2. To show what the library has (d) By a given author
- (e) On a given subject and (f) In a given kind of literature: and
3. To assist in the choice of book as to its (g) Edition, and (h) Character

According to Margaret Mann ‘the

purpose of cataloguing is to put order into a collection of books so that volumes may be located and used for reference and circulation.

In general the library catalogue is expected to answer the following queries of the readers: (a) Is a particular book in the library? (b) Which books by a particular author are in the library collection? (c) Is there a book in the library with such and such title? (d) Is there a book in the library with such and such collaborator i.e. editor, translator, reviser, compiler, illustrator etc. (e) Which are the books in the library with such and such series. (f) The books on a given subject. (g) To provide bibliographical information of a particular book i.e. author, title, series, edition, publisher, year of publication etc.

PHYSICAL FORMS OF LIBRARY CATALOGUES

The library catalogue is available in many physical forms. But it is to be remembered that the most popular form of the library catalogue is the card form. Some of the physical forms of catalogue are:

- **Printed book catalogue**

As the name suggests, it resembles a book or a register in appearance. The entries are printed on separate sheets as per desired arrangement and the sheets are then bound together to form a book or register. It is easy to prepare, however, it lacks flexibility. Entries for newly coming books cannot be accommodated at proper places, hence, it requires frequent revisions. As such it is not economical to keep it up-to-date. Moreover, it cannot be used by more than one user simultaneously. Only a single user can use it at a time. However, it has the advantage of portability. Its use is not subject to the availability of electricity and is free from any machinery fault.

- **Sheaf catalogue**

This form consists of separate sheets, preferably of manila paper, on which a couple of entries are printed. The sheets in turn are punched at one side and loosely bound either with a spiral thread or a comb spine. This form resembles the book form, as it shares most of the advantages of the book form. It is a bit superior to the book form in the sense that it partly overcomes the non-flexibility problem faced by the former. However, it becomes much voluminous and has a disadvantage as the flimsy paper of the catalogue entries make insertion and withdrawal less convenient.

Card catalogue

These are stiff paper cards of the dimension of 12.5 X 7.5 cm (3 x 5 in.) size and 0.25 mm thickness are used to prepare different catalogue entries. One card is used for every individual entry, main or the added. The card has a small hole in the lower middle part, so that each card can be inserted into a steel rod. The cards held together by the steel rod are arranged as per the desired sequence in wooden trays. The wooden trays are then placed in the pigeon holes of the catalogue cabinet. Each tray, on its outer face is marked by an appropriate label in alphabetical or classified sequence, the sequence in which the cards are arranged inside. Entries for newly coming books can be accommodated at proper places. It does not require frequent revisions. As such, it is economical to keep it up-to-date. Moreover, it can be used by more than one user simultaneously; each user can use one or the other tray at a particular time. Its use is not subject to the availability of electricity. It is free from any machinery fault. However, such catalogue is voluminous and lacks portability. Generally, it is said that to browse the cards is more cumbersome than the book or sheaf form of catalogue.

Catalogue entries are prepared according to some code or rules. The main catalogue entries consist of the following information according to majority of the cataloguing codes: Call Number, Author, Title, Subtitle, Edition, Statement Imprint(publisher, Date of publication and place of publication), Series, Notes, Contents and Accession Number.

- **Shelf list**

It is a catalogue of books and represents the order in which they stand on the shelves. Here each document title is represented by a card with all the bibliographical details as in the case of the catalogue card. The shelf list is very useful tool for stock taking process in the library, as for each document there is a card exactly depicting its location on the shelf.

- **Computerized Catalogue (Online Public Access Catalogue)**

The problems faced by the previous forms of catalogue have been overcome to a great extent by the computers. With the advent of computers, the library activities ranging from acquisition to withdrawal of books from the library records can be automated. Same is the fate of cataloguing. The process not only helps in preparation of different catalogue entries, but also, in generation of book type or card type printouts. In addition, it has revolutionized

the storage and retrieval mechanism of the libraries through its electronic version. As a matter of fact, OPAC (On line Public Access Catalogues) are nowadays available in libraries. The OPAC can, not only be used on a stand-alone computer, but can also be put on the INTRA or INTERNET. This makes it possible for a library to extend its services not only to its clientele but to the interested / needy persons of the locality, region, nation or the entire world. OPAC or computerised catalogue is very dynamic in the sense that it is highly flexible, easy and economical to maintain and capable of meeting almost every possible approach of the user. The searching capability is very fast and accurate. A number of libraries in our country are computerizing their catalogue and the list of library materials is displayed on the screen. Although rather expensive, it has the advantage of updation, no wear-tear in use and multiple storing of the catalogue. A printed copy of the whole catalogue can also be produced through a printer connected to the computer.

Web OPAC

Web OPAC is an OPAC which is provided on the web and with the help of internet any user can access it from anywhere. Whereas OPAC can facilitate a user to access materials while in the library, Web OPAC has the advantage of being available worldwide and accessible any time.

ARRANGEMENT OF LIBRARY CATALOGUE As mentioned earlier, a catalogue is a list of materials in a library or collection. The entries in the list are arranged by some systematic order. This order, or mode of arrangement, determines the inner form of the catalogue. There are many inner forms of catalogue as given below:

- 1) **Author catalogue:** a formal catalogue, sorted alphabetically according to the authors' or editors' names of the entries.
- 2) **Title catalogue:** a formal catalogue, sorted alphabetically according to the title of the entries.
3. **Subject catalogue :** The subject catalogue is a catalogue in which the headings on the entries designate the subject matter of the document and the entries are arranged systematically to enable subject identification and retrieval. If the headings are arranged alphabetically, the catalogue is an alphabetic subject catalogue. On the other hand, if the

headings are classified symbols arranged according to a classification scheme, the catalogue is then known as a classified subject catalogue.

s/n	Card Catalogue	OPAC	Web OPAC
1.	Only one user can use at a time	Large number of users can use at the same time from various access points	Large number of users can use at the same time from various access points
2.	Users can search only by a single access point, e.g., author, title, subject heading.	Users have many access points, e.g., author, title, subject heading, ISBN keywords, etc.,	Users have many access points, e.g., author, title, subject heading, ISBN keywords, etc
3.	Cannot be used in electronic environment	Users can broaden or narrow down search by use of various search operators	Users can broaden or narrow down search by use of various search operators.
4.	Usage is limited within library only.	Usage is limited as only the user within a LAN can use it.	Usage is global, as a user can access it from anywhere, at anytime
5.	Library is to follow cataloguing rules / codes	Users have to follow the OPAC software of the particular library	As here HTML files are used, which are hyperlinked to the subject area or the discipline

ELECTRONIC RESOURCES AND ONLINE DATABASES

The Anglo American Cataloguing Rule 2 glossary (2002) defines electronic resources ‘as any work encoded and made available for access through the use of a computer and includes electronic data available by remote access and direct access (fixed media). Remote access refers to the use of electronic resources via computer networks while direct access refers to the use of electronic resources via carriers (e.g. discs/disks, cassettes, cartridges) designed to be inserted into a computerized device or its auxiliary equipment’.

Gbaje (2010) also added that electronic resources are a term used to describe all of the information products that a library provides through a computer network.

Electronic resources are widely used in universities among academics and as observed by Ansari & Zuberi (2010) they are used to prepare lecture, for research purpose and to gain subject knowledge.

Electronic resources include e-books, e-journals, e-bibliographic databases/ online databases on many disciplines such as JSTOR, OARE (Online Access to Research in the Environment), AGORA (Access to Global Online Research in Agriculture), HINARI(Health Inter-Network Access to Research Initiative), EBSCOHOST, DOAJ(Directory of Open Access Journal), NUC Virtual Library, LISA(Library and Information Science Abstract) library website pages, LexisNexis, ERIC, etc. whether free or fee-based, CD-ROM required to support research in the subject covered.

Electronic resources covers such things as full-text databases, electronic journals, image collections, multimedia products, collections of numerical data, it is also any electronic product that delivers a collection of data, be it text, numerical, graphical, or time based as a commercially available resource(Lee&Boyle, 2004)

Types of E-Resources

Daniel (2010) defines an electronic book as an electronic text (e-text) that forms the digital media equivalent of a conventional printed book, often protected with a digital rights management system. Examples include www.books.google.com, <http://www.freebookspot.me/>. An electronic book (e-book) is a portable hardware and software system that can display large quantities of readable textual information to the user, and that lets the user navigate through this information. Printing and downloading functions are usually available, but are restricted to protect copyrights.

The advantage of having e-book in a library's collection is that the book/title is always available hence the issue of the library closing hours is not a problem. Also searching on the part of the users becomes relatively easy because searching can either be performed through the authors name, title of the book, publishers name and through the call number by entering any of these into the computer.

Another form of electronic resources is e-journal. An e-journal can be viewed as a digital version of a journal that is accessible via the web, or CD using an electronic device

such as a computer. The advantage of having electronic journal in a library's collection is that its search ability is flexible i.e. it can either be based on simple or advanced search; there is also the linking to, from, within and between articles. Despite its advantages, for users that are not computer literate and whose search ability skill is minimal the full benefit of e-journals may not be attained.

Electronic resources can also be viewed from the point of **aggregated databases**. An aggregated database as defined by Martin and Hoffman (2002) as "A collection of electronic resources (usually full text) from separately issued publications, assembled as a convenience to libraries and other subscribing institutions". However, aggregated databases tend to have volatile contents, with titles appearing and disappearing and years of coverage changing frequently, hence the need to monitor and manage them appropriately. Aggregator databases provide linkages from library's web page to table of content of journals within the database, bibliographic citations in database to journal outside the database.

Library website/portal as a form electronic resource allows a library to customise online access to collections of information resources by creating a list of internet connections much like a personalised directory of street address. It is designed to reduce information overload by allowing patrons to select only the resources they wish to display on their personal interface (Dictionary of library and information science, 2004). The benefit of a library portal/website is that it provides a single point of access to library resources, helps to direct users to specific resources more readily and on the part of the library it helps to improve service delivery. The essence of a library having its own portal/website which is a form of electronic resource is to facilitate specific access to resources and also to provide users with relevant specific information resources sites available.

Benefit/Importance of E-Resources

The major objectives of the adoption of e-resources are to facilitate access to international information resources via the Internet as well as the timely dissemination of both local and international research output (Okello-Obura & Magara, 2008). It is therefore essential for libraries to have e-resource in its collection though they are not to replace the print resources in itself but to act as supplement to the library's collection.

The benefit of having e-resource is that e-resources is always available, however its availability depends on the user being connected to either the internet and having good power supply.

Another advantage of e-resources is that a variety of specific resources is available and linked to each other, it is more convenient and less intimidating compared to when searching in a physical library, and on the part of the library there is less stress on library staff and space for physical storage of resources is conserved. However among its varied benefits electronic resources provide users with too much information, there is a need to sort through the vast amounts of information to find what is useful, it is easy to get distracted or lost on a tangent, and that it is hard to determine when to quit searching for information in order to start writing.

1. Multi-access: E-resources unlike physical books provide an avenue for many users to use the same materials at the same time. Similarly the issue of library closing hours doesn't come to play as e-resources is always available 24hours a day and 7days a week provided the subscription fee is paid.
2. Speed: it is quicker and easier to browse, or search and retrieve/extract information from materials and copy to other material. It is also easy to cross-search or reference between different publications.
3. Content: E-resources has the avenue of adding mixed media such as images, videos, audio, animation etc to explain salient issues which cannot be obtained in print media.
4. Management: E-resources can be managed effectively by appropriate software and their use can be tracked.
5. Storage: The cost of providing physical storage is quite expensive to maintain compared the amount of information physically available can't be compared to

Access to E-Resources

Before the advent of the introduction of information technology into libraries access to materials was often restricted to an individual at a time and it will require the person presenting a mode of the library's identification such as a current and valid library card. Unlike print collections, where the library can control access and thus closely monitor use, the electronic content is usually in the control of an outside hosting site (Pesch, 2008).

As late as the early 1990's, the library's primary method of access management to its collections was either performed at the library's entrance or through the use of publicly inaccessible collections or "closed stacks" that required some form of permission or authorization to access them.

Another form of access is usually introduced when users want to borrow materials from the library and it is typically done by users presenting a mode of identification. With the introduction of online e- resources such as e-journals and online databases, these traditional methods of access management became no longer sufficient and it was no longer possible just to control access through physical methods, additional methods were needed (Rodriguez & Zhang, 2008).

Access is therefore defined as the privilege of using a computer system or online resource, usually controlled by the issuance of access codes to authorised users. It is also the ease with which a person may enter a library, gain access to its online systems, use its resources and obtain needed information regardless of the format (Dictionary of library and information science, 2004). Access to E-resources is usually through the following

Authentication

Is a means by which a publisher or supplier creates access to the resources and this is through username and password, and the IP authentication.

Username and Password

In order to gain access to the e-resources the user is usually required to enter the username and the password. The username and password may be generic for the institution or linked to one or more specific individuals-sometimes one username and password will be shared by several people.

The advantage of this system is that it can identify use by a particular individual or group of individuals. This can be useful for tracking use(possibly just for monitoring purposes, but also for charging), for building profiles(users can save their searches and return to them in the future), but above all (from the publisher's point of view) for penalising misuse.

Access via login and a password is less preferred as it presents a number of challenges around dissemination and control of passwords, particularly when a library serves a large user base.

If a vendor insists on password-based access, disclaimer in the license agreement must be made about the library's inability to control distribution of this password to non-affiliates.

IP AUTHENTICATION

Internet Protocol authentication is based on a form of identification using internet standards(the username and password solution can relate to non-internet –based products). This usually means that the supplier of the database checks that the user is legitimate according to the IP address, i.e the code that identifies the user's computer to the rest of the internet. Every computer/machine using the internet has a specific IP address in the form of a series of four numbers separated by points, e.g 123.4.56.78. from left to right the numbers gradually get more specific to the machine,so in the above example 123.4.56 may be identifying the institution , its type, the department within the institution and so on, while 78 could be the individual machine. This unique number can therefore be a handy way of authenticating use.

The supplier of the remote database maintains a list of all IP numbers of legitimate machines: when the user is trying to access the database, the IP address of the client machine is automatically checked against the suppliers's own list. If the numbers tally access is granted. More commonly a subscription is taken out by a whole institution rather than an individual(or group of individuals), so it is easier for the supplier to be given and to maintain, a list of the root IP addresses(rather than every number for each machine), e.g. '123.4.56.x'(with 'x' implying any number).

A subscription may also be based on the domain name of the machine. This is character-based identifier rather than numerical and thus more recognisable to the user, e.g. 'gov.uk', 'ox.ac.uk' or 'wvu.edu'(the domain name often appears in URLs for the website of that institution. This means of authentication tells the supplier that you want to allow access to the database from all machines within the 'gov.uk' domain. This is an extremely good way of getting large numbers of users authenticated quickly.

Advantages of IP Authentication

1. It can easily be set up and maintained by both supplier and client (usually by an administrator). The relevant information the supplier needs is simply a list of root IP numbers or, even easier, a domain name.

2. It involves no intervention by the user. The process is performed automatically (once it has been set up), and thus users avoid the problems of mistyping or forgetting passwords.
3. IP-address recognition also provides access to users via a proxy server allowing authorized library users to access content from outside the physical confines of the library. In such circumstances a commercial database "sees" and recognizes the library IP address, not the user's home or any other IP addresses, and grants this user access.

Disadvantages of IP Authentication

1. One has no control over who is accessing the material, only where they are accessing it from (physically or virtually). Although we have noted passwords can be traded, it is still possible to trace misuse of the system to a particular individual (or more correctly to a particular username).
2. In IP authentication one can often only trace misuse to the machine the perpetrator was sitting at, not the individual's identity (unless access to the machine is somehow monitored). This can present problems when one has open access

Online databases

America: History and life

This database has access to complete bibliographic reference to the history of the United States and Canada from prehistory to present. It also has 490,000 bibliographic entries for periodicals dating back to 1954 and also over 2000 journals published worldwide

JSTOR

It offers core journals in economics, history, political science and sociology as well as in other key fields in the humanities and social sciences. It also includes 119 titles in twenty-one disciplines. The collection can be searched or browsed by discipline, title, or publisher.

EBSCOHOST

AGRIS: Agricultural database

This database covers agriculture, forestry, animal husbandry, aquatic sciences and fisheries, human nutrition, extension literature from over 100 participating countries. Material includes

unique grey literature such as unpublished scientific and technical reports, theses, conference papers, government publications and more. It is free

Directory of Open Access Journals (DOAJ)

Education Resources Information Center(ERIC): This is an online digital library of education, research and information. ERIC is sponsored by the institute of Education sciences of the United States Department of Education. ERIC provides access to more than 1.3million bibliographic records(citations, abstracts, and other pertinent data) of journal articles and other education related materials.

LexisNexis

This is an electronic database for legal and public-records related information. It is subscription based